

US cancer rate declines

Debbie Josefson, *San Francisco*

The overall incidence of new cancers and cancer deaths in the United States fell between 1990 and 1996, but increases in adolescent smoking could reverse this trend, says a new report (*Journal of the National Cancer Institute* 1999; 91:660-1, 675-90). The *Annual Report to the Nation on the Status of Cancer, 1973-1996* confirmed the decline in cancer incidence and mortality first noted last year. Overall cancer incidence dropped by an average of 0.9% per year between 1990 and 1996, and cancer mortality decreased by 0.6% per year.

Incidence data used in the study were culled from 11 population-based cancer registries. They showed that men between the ages of 25 and 44 and over 75 years old had the greatest decrease in the number of new cancers diagnosed, with statistically significant declines in leukemias and cancers of the lung, colon and rectum, urinary bladder, oral

cavity, and pharynx. Rates of prostate cancer also declined. Women had statistically significant decreases in new cases of colorectal cancers; rates of leukemias, and oral cavity and pharyngeal cancers also declined. The incidence of breast and uterine cancers remained stable from 1990 to 1996. Deaths from breast cancers declined, however, by an average of 1.7% a year from 1989 to 1996. The only cancers whose incidence increased between 1990 and 1996 were melanomas, up 2.7% per year, and non-Hodgkin's lymphomas, up 0.6% per year.

But the upward trend in teenage smoking threatens to reverse gains made in cancer prevention. Data from the National Youth Risk Behavior Surveillance System showed that smoking increased significantly among high school students, from 27.5% in 1991 to 36.5% in 1997. "Unless we invest now in antitobacco efforts aimed at our youngest citizens," said Donna Shalala, secretary of health and human services, "We will waste the progress achieved so far."

Falsifying data is main problem in US research fraud review

Mark Pownall, *London*

Half of the biomedical researchers accused of scientific fraud in the United States and subjected to formal investigations in recent years are guilty of misconduct, a new review has found. In the biggest review of scientific fraud ever published, the US Office of Research Integrity, has released data on nearly 1,000 allegations investigated from 1993 to 1997. The review covered inquiries into allegations of misconduct in research funded by the US Public Health Service, which has a budget of \$15 billion. Altogether, 150 cases were formally investigated after a preliminary assessment of their plausibility. Of these investigations, 76 resulted in findings of scientific misconduct, mostly falsification and fabrication but also plagiarism. Accusations of research fraud most often led to a ruling of misconduct for the least experienced medical researchers, while allegations against full professors and assistant professors less often resulted in guilty verdicts.

Larry Rhoades, director of the division of policy and education in the Office of Research Integrity, said that the figures suggested that

"the system is more protective of senior than junior researchers." Senior academics, he said, were more able to defend themselves against accusations. "But we do not know why there are these patterns. We hope researchers might find it interesting to look at these questions." Dr. Rhoades pointed out that those at the academic rank of associate professor, one step below full professor, seemed to attract the most allegations of misconduct. Nearly a third (31%) of the allegations were aimed at this grade, and 17 out of 45 allegations (38%) resulted in findings of misconduct.

Most whistleblowers were senior academics, chiefly professors and associate professors, responsible for about half the allegations. Dr. Rhoades called for international efforts to collect data on scientific fraud, to enable those policing medical researchers to make valid international comparisons.

Scientific Misconduct Investigations 1993-1997 is available from the Office of Public Health and Science, Office of Research Integrity, Suite 700, 5515 Security Lane, Rockville, MD 20852; tel 301-445-5300.

News in brief

Peyote supply shrinks as ranchers withdraw leases *see also p.328*

The supply of Peyote, a mind altering cactus used to promote inward reflection by members of the Native American church, is under threat from ranchers who want to lease their lands for more lucrative business. Peyote is legal for church members, since Congress, backed by the Drug Enforcement Agency, gave people the right to use the drug for religious purposes in 1994. Peyote is claimed to reduce alcoholism rates among Indians—a major health threat in most tribes.

Sex can ward off colds

Levels of IgA, found in saliva and mucosal lining, are raised, albeit slightly, in people who have regular sex, compared with abstainers. In a study from Wilkes University in Wilkes-Barre, presented at the Eastern Psychological Association in Providence, researchers asked 111 undergraduates how frequently they had had sex the previous month and measured levels of IgA in their saliva. The researchers that sexually active people may be exposed to more infectious agents and hence produce more IgA than non-active people.

Oregon judge bans HIV-positive woman from breast feeding

The state of Oregon has ordered an HIV-positive mother not to breastfeed her infant. The mother, Kathleen Tyson, who tested positive six months into her pregnancy, disputes that HIV causes AIDS. Three weeks before giving birth she discontinued her antiretroviral medications and refused AZT during delivery. A temporary court order given previously ordered the Tysons to give their infant AZT for six weeks. The family will be visited to make sure they comply.

Homicide main cause of death for children under one

Homicide, accidental suffocation, motor vehicle accidents, fire, drowning and choking are the main causes of injury related death for children under one, according to a study from the National Institute of Child Health and Human Development. The data were analyzed from linked infant birth and death certificates. Infants were more likely to die from injuries if their mothers were young, unmarried, had lower levels of education, had older children and were Native American or African American. Native American infants were at greatest risk of motor vehicle accidents and drowning.